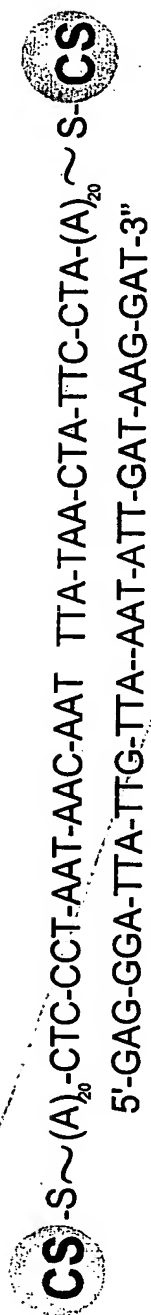
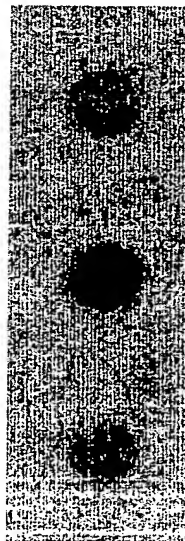


Fig. 1

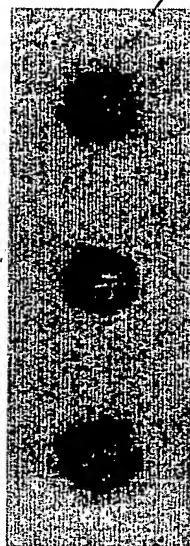


A

I II III I II III



B



C

Fig. 2

UV-Vis spectra of Pt and Pt/Au coreshell nanoparticles

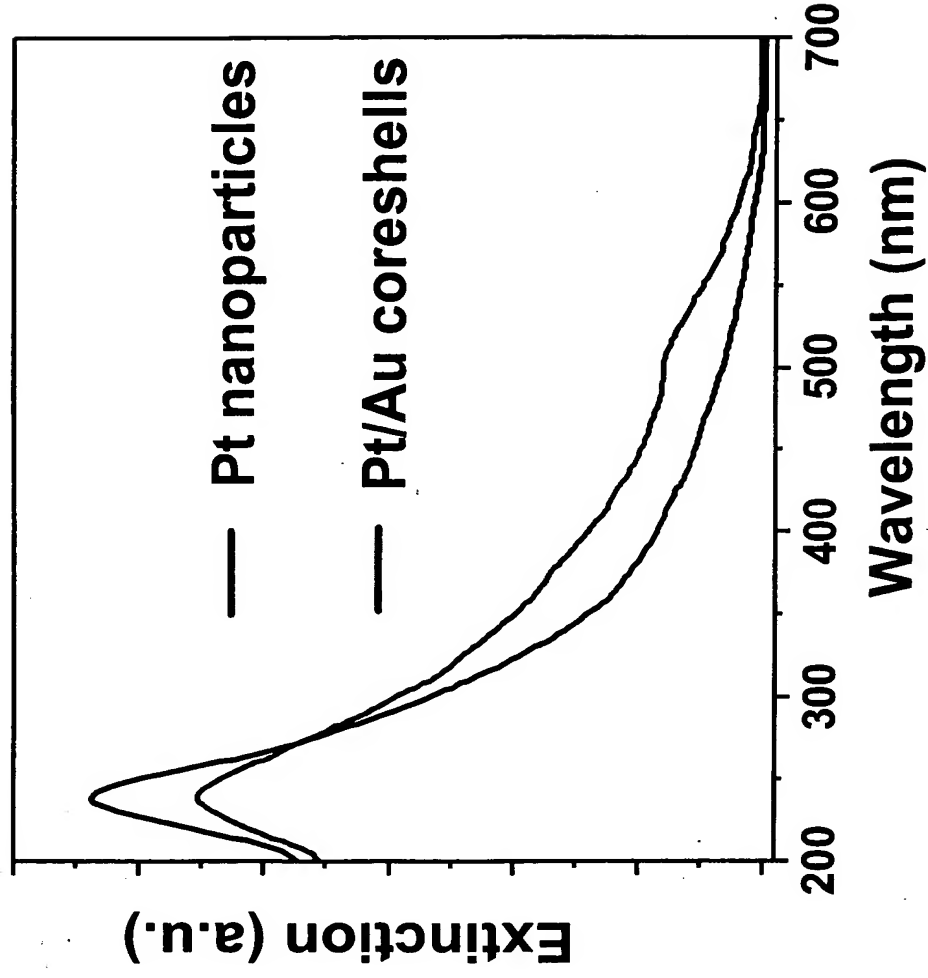


Fig. 3

Growth of Au on the surface of Fe₃O₄ nanoparticles

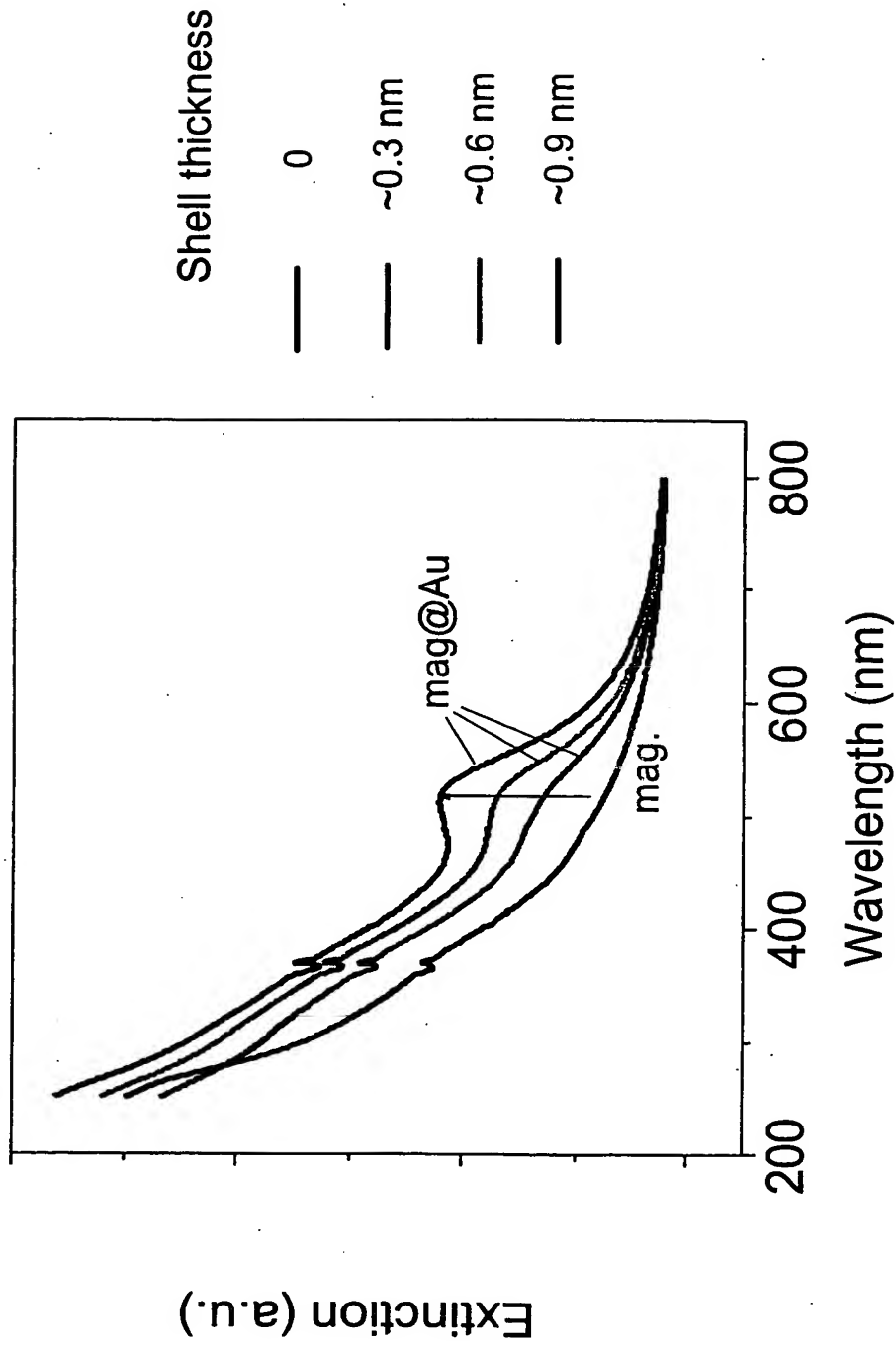
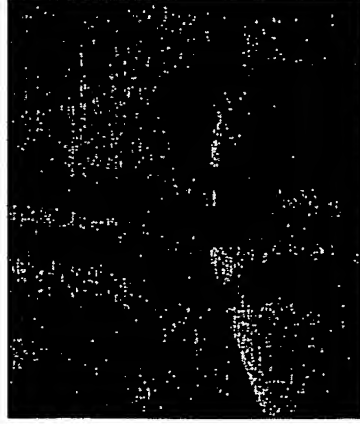


Fig. 4

Magnetic properties of gold coated Fe_3O_4 nanoparticles

magnet



Without a magnetic field

With the color of
gold nanoparticles

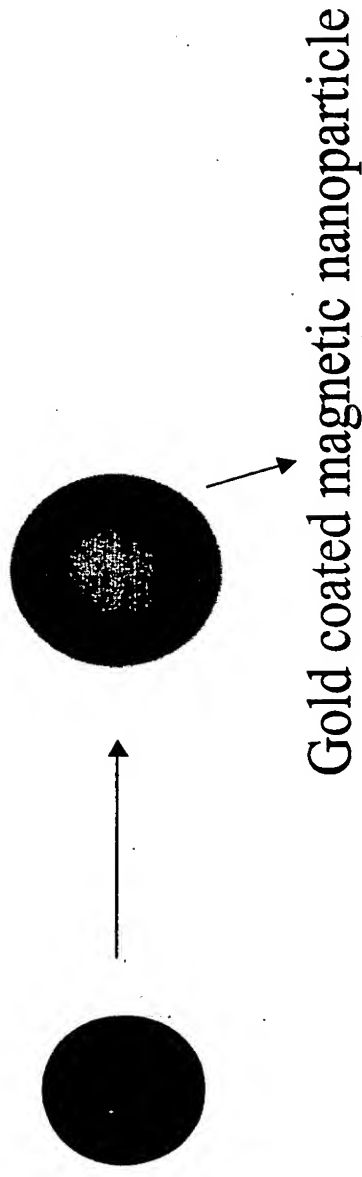


In a magnetic field for 12 hrs

Colorless

Fig. 5

Coreshell Approach to Magnetic Gold Nanoparticles



A: metal oxides magnetic cores: Fe_3O_4 , Co_3O_4

B: pure metal cores: Fe, Co, Ni...

C: alloy metal cores: FePt, FeAu

Fig. 6

Fig. 7

